

JAKAB, Andras; SCHAFER, Iajos; TAPFER, Dezso, dr.; RADETZKY, Jeno;
PATKAI, Imre, dr.; BABAY, Karoly; SOLYMOSY, Laszlo, dr.;
GYORY, Jeno; FEKETE, Karoly; FERENCZ, Miklos; GEREBY, Gyorgy;
SZEMERE, Laszlo; SAGHY, Antal, dr.; CSABA, Jozsef; KEVE, Andras,
dr.; AGARDI, Ede; KOFFAN, Karoly; SCHMIDT, Egon

Data on the avifauna of Dunantul. Aquila 69/70:260-266 '62-'63
[publ. '64].

PATKANCHIN, B.

On F. Klein's model of hyperbolic geometry in Euclidean geometry. p. 97.

GODISHNIK. MATEMATIKA I FIZIKA. Sofia, Bulgaria, Vol. 50, no. 1 pt. 2.
1955/56 (published 1958)

Monthly List of East Accession (EEAI) LC, Vol. 9, No. 1 January 1960

Uncl.

1. PATKANCV, U. G.
2. USSR (600)
4. Loading and Unloading
7. Railroad car unloader. Masl. zhir. prom. 18 no. 1 1953

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

PATKANOV, N.M.; YATSUN, N.P.; DVORETSKIY, I.V., inzhener; SOKOLOV, S.P.,
inzhener

Determining the shape of shuttle tips for the picking mechanism of
type-H automatic looms. Tekst.prom.15 no.8:30-32 Ag '55.

(MLRA 8:11)

1. Glavnyy inzhener fabriki imeni Dzerzhinskogo Glavlenskhlopproma
(for Patkanov) 2. Nachal'nik tkatskogo tsekha fabriki imeni Dzer-
zhinskogo Glavlenskhlopproma (for Yatsun).
(Pickers (Weaving))

PATKANOV, Ye. G.

PATKANOV, Ye.G., inzhener; BAGLAY, G.I.; SIDORENKO, I.K.

Unit for heating extractors. Masl.-shir.prom. 19 no.5:27-28 '54.
(MLRA 7:9)

1. Dnepropetrovskiy masloshirkombinat.
(Heating) (Extraction apparatus)

BAGLAY, G.I.; PATKANOV, Ye.G.; RZHEKHIN, V.P.; SEMENOV, Ye.A.

Manufacture of phosphatide concentrates by continuous hydration of
soy and linseed oils. Mal.-zhir. prom. 24 no.4:7-9 '58.

(MIRA 11:5)

- 1.Dnepropetrovskiy maslozhirkombinat (for Baglay, Patkanov).
- 2.Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for
Rzhekhin, Semenov).

(Phosphatides) (Oils and fats)
(Hydration)

PATKANOV, YE. G.

30373

Nyekotoryye dannyye po zksplotatsii shnyekovykh pryessov. Pishch. Prom-st'
SSSR, Vyp. 13, 1949, S. 37-39.

SO: Letopis' No. 34

Patkanov
BAGLAY, G.G.; PATKANOV, Ye.G.; RZHEKHIN, V.P.; SEMENOV, Ye.A.

Obtaining phosphatide concentrates and high-grade oil.
Masl.-shir.prom. 23 no.7:7-10 '57.

(MLRA 10:8)

1. Denpropetrovskiy maslozhitkombinat (for Baglay, Patkanov)
2. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.
(Phosphatides) (Oils and fats)

PATKANOV, Ye. G.

PATKANOV, Ye. G., inzhener.

Processing sunflower seeds from varieties with a high oil content.
Masl. -zhir. prom. 19 no.2: 31-32 '54 (MLRA 7:4)

1. Dnepropetrovskiy Masloshirkombinat. (Sunflower seed oil)

PATKANOV, YUG.

30373

Nyektoryye dannyye do eksplotatsii srnyekovykh pry-sadov. Pishet. r. n. 1981, v. 13, 1:49, s. 37-38

SC: LETCPIS' No. 34

1. PATKANOV, YE. G., ENG.
2. USSR (600)
4. Drying Apparatus
7. Pneumatic drier for sunflower seeds. Masl. zhir. prom. 17, no. 6, 1973.

9. Monthly List of Russian Accessions, Library of Congress, February 1973, Unclassified.

PATKAN'YAN, K.G.

Ascorbic acid and vitamin B₁ in urine of syphilitics. Vestnik Venerol.
Dermatol. '53, No.1, 25-9. (MLRA 6:3)
(CA 47 no.14:7083 '53)

DATAMIAN, W. C.

Urine

Ascorbic acid and vitamin F_1 in urine in syphilis. *Test. ven. i. derm.* 1953, 1, 1.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

PATRAM'YAN, E. C.

Syphilis

Ascorbic acid and vitamin B1 in urine in syphilis. Vestn. ven. i derm. so. 1, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

PATKANYAN, K. G.

Vitamins

Ascorbic acid and vitamin B₁ in urine in syphilis. Vest. ven. i derm. No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Unclassified.

PATKANYAN, K. G.

Vitamins

Ascorbic acid and bitamin B in urine in syphilis. Vest. ven. i derm. No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. UNCLASSIFIED.

PATKAN'YAN, K.G.

Ascorbic acid and vitamin B₁ in urine in syphilis. Vest. vener.,
Moskva no.1:25-29 Jan-Feb 1953. (GIML 24:2)

1. Candidate Medical Sciences. 2. Of the Clinic for Skin and Vene-
real Diseases of the Military Medical Academy imeni S. M. Kirov.

PATKAY, Jozsef, dr.

Incarcerated hernia caused by congenital aperture of
the mesentery. Crv. hetil. 106 no.43:2041-2042 24. 1 '65.

1. Dunaujvarosi Tanacs Korhaza, Sebeszeti Osztaly (foorvos:
Patkay, Jozsef, dr.).

PATKAY, Jozsef, dr.

On hepatolithiasis. Orv. hetil. 106 no.46;2185-2186 14 N '65.

1. Dunaujvarosi Tanacs Korhaza, Sebészeti Osztaly (foorvos:
Patkay, Jozsef, dr.).

HUNGARY

PATKAY, Jozsef, Dr., Council Hospital, Department of Surgery
(Tanacs Korhaza, Sebészeti Osztaly) in Dunaujvaros (Physician-in-
Chief: PATKAY, Jozsef).

"Isolated Spleen Tuberculosis"

Budapest, Orvosi Hetilap, Vol 107, No 26, 26 Jun 1966, pp 1236-1237.

Abstract: The author described the case of a 7-year old boy suffering from isolated spleen tuberculosis. The diagnosis was made following traumatic rupture. Splenectomy performed six years ago appears to have effected cure. In cases of non-operability, X-ray treatments may be employed. 27 references, including 11 German, 2 Russian, 7 Hungarian, and 7 Western.

1/1

- 210 -

~~Mediastinal xanthofibroma.~~ Orv. hetil. 99 no.14:487-488 6 Apr 58.

1. A Sztalinvarosi Tanacs Korhaza (Igazgato: Groszman Sandor dr.)
Sebészeti Osztalyanak (foorvos: Patkay Jozsef dr.) kozlemenye.

(MEDIASTINUM, neoplasma

xanthofibroma, case report (Hun))

(FIBROMA, case reports

xanthofibroma of mediastinum (Hun))

PATEAY, Jozsef, Dr.

Retroperitoneal appendicitis. Orv. hetil. 99 no.8-9:288-290 23 Feb -
2 Mar 58.

1. A Szatlinvarosi Tanacs Korhaza (igazgato: Grossman Sandor dr.)
Sebeszeti Osztalyanak (foorvos: Parkay Jozsef dr.) kozlemenye.

(APPENDICITIS

retroperitoneal, clin. aspects & case reports (Hun))

HUNGARY

PATRAY, Dr. Jozsef, and VONCZAY, Dr. Jozsef, Hospital of the Council of Dunaujvaros (Dunaujvarosi Tanacs Kohaza), Department of Surgery (Sebészeti Osztály) (Chief Physician: Dr. Jozsef PATRAY) and Department of Pediatrics (Gyermekosztály) (Chief Physician: Dr. Jozsef VONCZAY).

"Hemangioma Cavernosum Mesenterii"

Budapest, Magyar Orvosok, Vol 19, No 5, Oct 66; pp 324-326.

Abstract: Authors describe the case of mesenteral hemangioma the size of a man's fist in a child four and a half years old; the hemangioma had caused intestinal obstruction. It was successfully resected together with the intestine. This is the second such case published in the Hungarian literature. 9 References, predominantly Western.

PATKHULLAYEV, S.

Manifestation of heterosis in intra-subspecies crossing of
different corn varieties. Vop.biol.i kraev.med. no.3:98-104
'62. (MIRA 16:3)
(HETEROSIS) (HYBRID CORN)

GOLODKOVSKIY, V.L.; PATKULLAYEV, S.P.

Heterosis in crossing self-pollinated lines of corn. Lit.
biol. zhur. 9 no.1:63-66 '65. (MIRA 18:c)

1. Institut eksperimental'noy biologii tekhnicheskikh i zrnovykh
kul'tur AN UzSSR.

[illegible]

S/081/61/000/004/003/017
A005/A105

Translation from: Referativnyy zhurnal, Khimiya, 1961, No. 1, p. 93, # 1V1

AUTHORS: Patkin, P.N., Berezkina, V.V., Prutkova, N.M.

TITLE: The Extraction of Rare-Earth Elements and Yttrium From Nitrate Solutions by Tributyl Phosphate

PERIODICAL: "Izv. Timiryazevsk. s.-kh. akad.", 1960, No. 3, pp. 196-205 (English summary)

TEXT: The equilibrium distribution of lantanide nitrate between the aqueous and organic phases shifts into the side to form the complex $R(NO_3)_3 \cdot 3(C_4H_9)_3PO_4$ with an increase in intensity of intermingling of the phases. For strongly uniform intermingling of both phases, the stable distribution of the nitrates of rare-earth elements according to the phases is ensured with obtaining a constant value of the distribution ratio, which characterizes the regularity of the behavior of the rare-earth elements under given conditions. The saturated nitrate solutions of the rare-earth elements (4-7 Mol HNO_3 , 8-5 Mol NH_4NO_3) are most suitable for separating the rare-earth elements. Authors' summary

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

TOPA, Tibor; PATKOS, Andras; R.PELLY, Erno; KAPOSI, Gyula; TOMOR, Jozsef; BENE, Andras; CSOBALY, Sandor

Remark about the article entitled "Freight trains with one trainman on service." Vasut 12 no.12:18-19 D '62.

1. Mozdonyvezeto, Dunaujvarosi Futohaz "MHS" brigadja (for Topa, Patkos and R.Pelly). 2. Futo, Dunaujvarosi Futohaz "MHS" Brigadja (for Kaposi, Tomor and Bene). 3. Forgalmi osztaly vezetohelyettese (for Csobaly).

6(4)

SOV/107-59-3-17/53

AUTHORS: Rassadin, G., Rekach, A., Patko, G., Masters of
Amateur Radio

TITLE: The World Achievements of Amateur Radio Must be Sur-
passed (Prevzoyti mirovyye dostizheniya v radiosporte!)

PERIODICAL: Radio, 1959, Nr 3, p 14 (USSR)

ABSTRACT: During the past two years, Soviet amateur radio teams
participated in 10 international competitions and
demonstrated their superiority in many cases. How-
ever, in high-speed manual receiving and transmitting
of radio messages they were inferior to the Chinese,
North Korean and Bulgarian teams during competitions
held in Karlovy Vary and Peking. The authors explain
this by the fact that the responsible Soviet insti-
tutions are not active enough in the amateur radio
training. They mention that the Tsentral'nyy radio
klub DOSAAF (DOSAAF Central Radio Club) did not take

Card 1/2

SOV/107-59-3-17/52

• The World Achievements of Amateur Radio Must be Surpassed

any measures for improving the qualification of radio amateurs participating in such competitions. The authors ask that an open All-Union competition of radio amateurs be held to select and organize an amateur radio team. Experienced amateurs are requested to participate actively in training younger radio amateurs. The demand for an All-union Competition was approved by the Secretariat of DOSAAF.

Card 2/2

USSR/ Miscellaneous

Card 1/1 Pub. 89 - 4/21

Authors : Patko, G.

Title : How to master high speed reception on a typewriter

Periodical : Radio 7, 10 - 14, Jul 1955

Abstract : Advice is given by a champion of the radio amateur sport on how to reproduce high-speed radio reception on a typewriter (radio-telegraphy). Illustration.

Institution :

Submitted :

PATKO, G.

Draw more girls into the radio amateur movement. Radio no.3:3
Mr '56. (MLRA 9:6)

1. Master radiolyubitel'skogo sporta, chempion Dobrovol'nogo
obshchestva sodeystviya armii, aviatsii i flotu po priyemu i
peredache radiogramm,
(Radio operators)

PATKOS, Gyorgy, dr.

Examination of 10 per cent citric acid solution as a possible replacement for acidum aceticum in laboratory work. Orv. hetil. 96 no.35:980 28 Aug 55.

1. IX. Mester utcai Szakorvosi Rendelo Intezet Laboratoriumnak (igazgato: Palyi Ede dr.) kozlomenye.

(CITRATES

citric acid solution, replacement of acetic acid in laboratory work)

(ACETIC ACID

replacement by 10 per cent citric acid solution in laboratory work)

PATKO, Jozsef

"Nuclear radiation in chemical analysis" by JuraJ (Gyorgy) Tolgyessy.
Reviewed by Jozsef Patko. Magy kem lap 18 no.4:190-191 Ap '63.

H/006/62/000/002/002/002
D249/D303

AUTHORS: Toperczer, Johanna and Patkó, József

TITLE: Dosimetry in the service of industry

PERIODICAL: Magyar kémikusok lapja, no. 2, 1962, 62-70

TEXT: Various irradiating units and dosimetric techniques are reviewed. Radiation doses were measured first for therapeutical applications which showed its effect in the definition of units. In determining the unit of dose (rad) only the fraction of radiation intensity is considered which is communicated to the absorbing material by ionization. The relation between the rad and roentgen units, the principles of their measurement, the difficulties in measuring radiation with energies higher than 3 MeV and the Bragg-Gray principle are discussed. A brief extension is made into the units of doses of corpuscular radiations. The type, energy of radiation, the total amount of the radiation dose and its intensity would determine the particular technique selected for the measurement. The authors discuss the following techniques: (1) Measuring instruments based on the ionization of gases. (a) The "thimble" ✓
Card 1/ 3

H/006/62/000/002/002/002
D249/D303

Dosimetry in the service ...

chamber is described for measuring X- and γ -rays in roentgen units. Methods for amplification of the ionization current are reviewed based on the Siemens universal dosimeter and of the Mekapion, Simplex and Duplex dosimeters. Fast neutrons are detected by the secondary ionization of protons. (b) Proportional and Geiger-Muller counters. (2) Scintillation counters. The advantages are the sensitivity towards γ -radiation, the short relaxation time (10^{-8} - 10^{-9} sec.) and the property that with the incorporation of a discriminator the energy of the particles of radiation can be determined. (3) Film dosimetry. This technique has advantages in the radiation protection of staff. A procedure is outlined for applying radiation standards and precautions in developing the films. (4) "Radiation protection" measuring instruments. The application of ionization and film dosimeters is described in the radiation protection of individuals, outlining the principle of rate and level meters. (5) Chemical dosimetry. These are considered to be the simplest and cheapest devices for measuring the doses of high energy and high intensity radiations. The sensitivity of chemical dosimeters

Card 2/3

FELSZERFALVI, Janos; PATKO, Jozsof

Measuring gamma rays by thermoluminescent dosimeter. ATOMI koi
4 no.3/4:169-176 D '62.

1. Kossuth Lajos Tudományegyetem Alkalmazott Fizikai Intézete,
Debrecen.

PATKO, Jozsef

"Solid body" dosimeters based on an optical principle. Fiz szemle
12 no.8:235-242 Ag '62.

1. Debreceni Kossuth Lajos Tudományegyetem Alkalmazott Fizikai Intézete.

ORBAN, Gyorgy, dr.; PATKO, Jozsef; BERTA, Istvan, dr.

The x-ray photochemical method for gradual dosimetry. Magyar. radiol.
14 no.3:162-168 Je '62.

1. A Debreceni Kossuth Lajos Tudományegyetem Alkalmazott Fizikai Intézetének (igazgató: Orban Gyorgy dr. egyetemi tanár) és a Debreceni Orvostudományi Egyetem Szülészeti és Nőgyógyászati klinikájának (igazgató: Arvay Sandor dr. egyetemi tanár) közleménye.

(RADIOMETRY)

~~PATKO, Jozsef~~, egyetemi adjunktus (Debrecen); TOPERCZER, Johanna, dr.
(Budapest)

Chemical effects of ionizing radiations. I. Term tud kozl
7 no.4:172-175 Ap '63.

1. Tudományos munkatárs (for Toperczer).

PATKO, Jozsef, egyetemi adjunktus (Debrecen); TOPERCZER, Johanna,
dr., tudományos munkatárs (Budapest)

Chemical effects of ionizing radiations. Pat. 2. Term tud
kozl 7 no.10:447-451 0 '63.

L 64086-65 EWT(m)/EWA(h)

ACCESSION NR: AP5022162

HU/0021/64/000/005/0303/0312

AUTHOR: Patko, Jozsef (Patko, Y.) (Doctor); Berta, Istvan (Doctor)

TITLE: Solid substance dosimeters

SOURCE: Magyar radiologia, no. 5, 1964, 303-312

TOPIC TAGS: radiation dosimeter, ionizing radiation, solid state device, luminescence, semiconductor device, radiation dosimetry

Abstract: [Authors' English summary modified] In addition to chemical dosimeters, dosimeters are increasing in their importance in which solid substances are used as detectors and the optical changes which occur in these solid substances under the effect of ionizing radiation can be used for dosimetric measurements. The dosimeters based on photo- and thermo-luminescence, the limits of applicability of which are very broad, are discussed in detail by the authors. Semiconductor detector dosimeters which are also suited for the measurement of dose output are discussed briefly as well. Orig. art. has 4 figures, 2 graphs, and 3 tables.

ASSOCIATION: Debreceni Kossuth Lajos Tudományegyetem Alkalmazott Fizikai Intézetének (Kossuth Lajos University of Debrecen, Institute of Applied Physics);

Card 1/2

L 64086-55
ACCESSION NR: AP5022162

Debreceni Orvostudományi Egyetem Női-Klinikájának és Röntgen Klinikájának (Medical
University of Debrecen, Gynecological Clinic and Radiological Clinic)

SUBMITTED: 00

ENCL: 00

SUB CODE: NP, SS

NO REF SOV: 000

OTHER: 026

JPRS

MARK
Card 2/2

L 17001-66

ACC NR: AP6008606

EPF(n)-2/EWP(j)/T/ EWA(h)/EWA(1)

GG/PA

SOURCE CODE: HU/0005/61/071/004/175/0172

AUTHOR: Hardy, Gyula; Nyitrai, Karoly; Varga, Jozsef; Patko, Marton
ORG: Research Institute for the Plastics Industry, Budapest (Muanyagipari Kutato
Intezet); Department of Plastics and Rubber Industry, Technical University,
Budapest (Muszaki Egyetem Muanyag- es Gumiipari Tanszeke)

TITLE: Studies in the field of solid-state radiation polymerization. Part 6:
Gamma-radiation-induced solid-state polymerization of vinyl laurate

SOURCE: Magyar kemiai folyoirat, v. 71, no. 4, 1965, 175-178

TOPIC TAGS: solid state, radiation polymerization, gamma radiation, monomer

ABSTRACT: Maximum polymerization rate was observed when the monomer's
temperature was near the melting point, + 3°C. The mobility of the mo-
lecules of vinyl laurate at this temperature was considered to be re-
latively high. The polymerization reaction was investigated under va-
rious operational parameters and in the presence of various compounds.
The results were presented and discussed in detail. Orig. art. has: 9 figures.
[JPRS]

SUB CODE: 07 / SUBM DATE: 07Aug64 / ORIG REF: 001 / OTH REF: 004

Card 1/1 *mg5*

2

SZABO, Iren, dr.; PATKO, Mihaly

Role of psychological factors in the management of socialist
brigades. II. Magyar vasut 7 no.8:2 18 Ap '63.

SZABO, Iren, dr.; PATKO, Mihaly

Theoretical problems of technological management. Vasut 13
no.6:30 Js '63.

SZABO, Iren, dr.; PATKO, Mihaly

Role of psychological factors in managing work brigades. Magy vasut
7 no.6:2 18 Mr '63.

PATKOS, Gyorgy, dr.

A rare combination of anomalies in an infant. *Gyermekegygyaszat*
12 no.3:81-85 Mr '61.

1. A IX. ker. Mester u. Szakorvosi rendelőintézetből. (Igazgató:
Palos Lajos dr.)
(ABNORMALITIES case reports)

PATKOS, Istvan

Lessons from stockbreeding. Mezogazd techn 3 no.9:4-5 '63.

PATKOS, Istvan

Modern milking and milk refr. sorting machinery. Mezogazd te. in
4 no. 9:12-13 . 1964.

PATKOS, Istvan

Electric bucket crane with vibrating forks. Mezogazd techn 4 no.
10:9 '64.

PATKOS; MAJNEK

Electric water in animal husbandry. Mezogazd techn 5 no.2:6-7 '65.

PATKOVA, Anna

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: MD

Affiliation: First Pediatric Clinic (I. detska klinika) Chief Dr Zdr. Brunecky; Brno

Source: Prague, Prakticky Lekar, Vol 41, No 15-16, Aug 21, 1961; pp 693-694

Data: "Poisoning with Perosillin in a Two-Year-Old Boy"

CZECHOSLOVAKIA

770 7-16-61
670 981643

PATKOVA, J.

Spring and summer in the life and customs of the Slovak people. p. 146.
No. 4, Apr. 1955.

SOURCE: East European Accessions List. (EEAL) Library of Congress.
Vol. 5, No. 8, August 1956.

PETROVA, J.

"A conference on research in the field of miners' culture in Dresden."

SLOVENSKY NARODOPIS, Praha, Czechoslovakia, Vol. 7, No. 2, 1956.

Monthly list of EAST EUROPEAN ACCESSIONS (MBAI), LC, Vol. 6, No. 7, July 1957, Unclas.

PATKOVA, J.

Karol Plicka celebrates his sixtieth year. p. 3.
SLOVENSKY NARODNIK, Bratislava, Vol. 3, no. 1, 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 1, Oct. 1955,
Uncl.

PATKOVA, J

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: Graduate historians (prom. hist.)

Affiliation: Ethnographical Institute SAV /Slovenska akademie ved; Slovak Academy of Sciences/ (Narodopisny ustav SAV), Bratislava.

Source: Bratislava, Nasa Veda, Vol VIII, No 4, 1961, pages 215-219.

Data: "Changes in the Style of Life and Taste of Our People."

Authors: NOSALOVA, V.
PATKOVA, J.

070 901643

PATKOVA, J.

Village of Bijacovce in the Spis area. p. 342.
KRASY SLOVENSKA no. 9, Sept. 1955
CZECHOSLOVAKIA

SOURCE: EEAL, Vol 5, no. 7, July 1956

KUCERA, J.; VALACH, V.; PANKOVA, V.

Paraganglioma of the urinary bladder in a 12-years-old girl..
Rozhl. chir. 44 no.6:386-390 Je '65.

1. Urologická klinika (prednosta prof. dr. J. Kucera, DrSc.),
patologickoanatomický ústav (prednosta doc. dr. V. Valach) a
dětská klinika (prednosta prof. dr. J. Holáček, CSc.) lékařské
fakulty Palackého University v Olomouci.

7
 Determination of acrylonitrile in various materials. 1.
 M. Sitránek, V. M. Černá, and V. I. Patková (Inst. Hyg.,
 Brno, Czechoslovakia). *Analyst* 87, 65-6 (1962). Acrylo-
 nitrile (I) in trace amounts is detected in waters, foodstuffs, grains,
 etc., by a previously described procedure (C.A. 82, 18094f),
 following extraction, purification, and separation by distillation of an
 azeotrope pair with iso-PrOH which has the composition 66%
 by weight of I and b.p. 71.7°. Under the conditions of the
 test, the azeotrope is collected at 78°. Bernard M. Brown.

2 May
 4/5 20 40

29

JAKABOS, Aron; PATKOVICS, Peter .

New machines and apparatus. Magy kem lap 16 no.7:337-339 J1 '61

TITKOV, N.P.; BOGDANOVA, Z.S.; GALAKTIONOVA, K.N.; KUROVA, M.D.; LAKOTA, B.M.; OZOLIN, L.T.; Primalni uchastnye: CHRKOVA, K.I.; ASHITKOV, Yu.R.; SMIRNOV, Ye.A.; PLATUNOV, A.A.; GALICH, V.M.; PATKOVSKAYA, N.A.; VLODAVSKIY, I.Kh.; GORLOVSKIY, S.I.

Outlook for introducing the flotation of ferrous metal ores.
Gor. zhur. no.9:57-62 S '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut
mekhanicheskoy obrabotki poleznykh iskopayemykh, Leningrad.
(Flotation) (Iron ores) (Manganese ores)

PATKOVSKIY, Andrey Borisovich; SHAROPIN, V.D., red.

[Ore dressing plants for the iron and steel industry]
Fabriki dlia okuskovaniia rudnogo syr'ia chernoi me-
tallurgii. Moskva, Izd-vo Metallurgiya, 1964. 399 p.
(MIRA 17:6)

PATKOVSKIY, Andrey Borisovich; TRAKHTER, V.S., redaktor; SHAROPIN, V.D.,
redaktor; ATTOPOVICH, M.K., tekhnicheskii redaktor.

[Ferrous metallurgy sintering plants] Aglomeratsionnye fabriki
chernoi metallurgii. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po
chernoi i tsvetnoi metallurgii, 1954. 238 p. (MIRA 8:1)
(Metallurgical plants)

SOV/137-57-10-18608

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 10, p 20 (USSR)

AUTHOR: Patkovskiy, A.B.

TITLE: New Trends in the Design Planning of Sintering Plants
(Novyye napravleniya v proyektirovanii aglomeratsionnykh
fabrik)

PERIODICAL: Tr. Nauchn.-tekhn. o-va chernoy metallurgii, 1956, Vol 8,
pp 111-117

ABSTRACT: The blending of the mix is best done by a semi-hopper type storage, which is suitable for total mechanization and permits the accumulation of large raw-material supplies. Preparation of the fuel by crushing in 4-roller crushers has completely proved its value. The limestone should be ground in a dry rod mill. The use of hammer mills for this purpose is not rational. If the raw materials have been blended in advance, volumetric proportioning of the mix by platter-type feeds is acceptable, but proportioning of the fuel requires prompt installation of weight-basis metering devices such as those being adopted in the building-materials industry. The use of a bed improves the course of the sintering process. However, the methods of

Card 1/2

SOV/137-57-10-18608

New Trends in the Design Planning of Sintering Plants

forming the bed have had inadequate study. This also applies to the question of the optimum amount of returns in the mix. The crusher currently used for the sinter has serious structural shortcomings. Grate-type screens for making the bed function unsatisfactorily and should be replaced by mechanical self-balancing or electrical vibrating screens. Recently, box-type conveyor and round coolers have made their appearance for cooling the sinter. The sinter may also be cooled in the machine itself. This makes it possible to use a portion of the machine without building additional equipment. New designs also provide for the mix to be loaded onto the belt by shuttle and drum feeds, and for the installation of cyclone batteries for gas cleaning, the dust being removed hydraulically. Experiments in sintering with upward blow, being performed in Australia, are worthy of attention.

Card 2/2

PATKOVSKIY, A.B.

Basic trends in improving technical methods and equipment for
ore dressing and planning ore-dressing plants. Gor.zhur.
no.5:3-7 My '62. (MIRA 16:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut
mekhanicheskoy obrabotki poleznykh iskopayemykh, Leningrad.
(Ore dressing)

PATKOVSKIY, A.B.

Design of ore preparation plants. Trudy Mekhanobr. no. 122:327-354
'59. (MIRA 14:4)

(Ore dressing—Equipment and supplies)

PATKOVSKIY, A. B.

25(5)

PHASE I BOOK EXPLOITATION

SOV/1497

Akademiya nauk SSSR. Institut nauchmoy i tekhnicheskoy informatsii

Metallurgiya SSSR, 1917-1957, t. 1 (Metallurgy of the USSR, 1917 - 1957, Vol. 1)
Moscow, Metallurgizdat, 1958. 745 p. 3,000 copies printed.

Ed. (Title page): I. P. Bardin, Academician; Ed. (Inside book): G. V. Popova;
Tech. Ed.: O. G. Bekker.

PURPOSE: The book is intended for scientific workers and engineers in metallurgical plants and in the machine-building industry. It may also be used by students in advanced courses in metallurgical vuzes.

COVERAGE: This collection of articles covers extensively practical and theoretical developments in Soviet metallurgy during the last 40 years. The material deals with the discovery and development of the major ore deposits and the growth of the metal industry in various parts of European and Asiatic USSR. Research institutes, laboratories, their location, and the names of the scientists and engineers involved are listed. Many papers contain so many references and names of various personalities that it was considered beyond the scope of the coverage of each article to list them. The authors claim that the processes,

Card 1/21

Metallurgy of the USSR (Cont.)

SOV/1497

methods and theories described in this book reflect the most recent developments in Soviet metallurgy.

TABLE OF CONTENTS:

Introduction

3

Bardin, I.P., and V.V. Rikman. Ferrous Metallurgy in the USSR During the Soviet Regime

9

The authors outline the development of the ferrous industry in the USSR from 1913 to 1955. Annual production figures are given and include regional distribution. Achievements of the Five Year Plans are mentioned. There are 16 Soviet references.

Patkovskiy, A.B. Preparation of Raw Materials for Blast Furnaces

33

An outline is given of the development of ore beneficiating plants in the USSR. There are flow sheets and diagrams showing basic methods of ore concentration. Agglomeration of iron ore is discussed. The importance of metallurgical research is stressed. There are 15 Soviet and 3 English references.

Card 2/21

Metallurgy of the USSR (Cont.)

SOV/1497

Dvorin, S. S. Coke and Chemical Industry in the USSR

61

The article gives the geographical location of coke plants and production figures from 1913 to 1955. The rate of development and the chemicals produced are listed.

Tsylev, L.M., and N.K. Leonidov. Development of Blast Furnace Production in USSR

86

The authors describe the increase of cast iron production from 1913 to 1956. As a result of intensive geological exploration new deposits of iron have been discovered in different parts of the USSR (locations given). A table lists the amount of pig iron and manganese produced. The article deals with the following subjects: fuel, design of blast furnaces and auxiliaries, dimensions of blast furnaces, loading arrangements, removal of iron and slag, air-blow installations, air-heat-ing arrangements, gas cleaners, miscellaneous equipment, design features, and the last chapter discusses in detail the means of boosting production of pig iron. There are 21 Soviet references.

Card 3/21

Metallurgy of the USSR (Cont.)

SOV/1497

Kondakov, V.V. Basic Trends in Boosting Blast Furnace Production

115

The subject discussed in this paper is the relative efficiency of blast furnaces expressed in cubic meters of blast furnace volume per ton of metal produced per unit of time. It is claimed that due to intensive investigations of combustion processes and chemical reactions in the furnace, and in consequence, better preparation of the charge, Soviet blast furnaces have reached new peaks of efficiency and productivity. There are 16 Soviet references.

Bardin, I.P. and M.A. Shapovalov. Using Oxygen-enriched Blowing in Blast Furnaces

125

Experiments were conducted with oxygen-enriched blowing to increase the output of blast furnaces. The values obtained were compared to those published by US and Belgian sources. Depending on the ore and the cast iron to be produced, oxygen enrichment varied from 25 to 30 percent. In some instances savings of coke were achieved. The text contains numerous graphs and diagrams dealing with experimental work on enriched blowing. There are 16 references of which 15 are Soviet and 1 German.

Card 4/21

Metallurgy of the USSR (Cont.)

SOV/1497

Tsylev, L.M., and M.Ya. Ostroukhov. Development in the USSR of the Theory of Blast Furnace Process

147

The article deals with the design and operation of very large blast furnaces with 930 to 1300 cubic meter capacity. A number of experiments were carried out to study the operating regimes in those furnaces. The physical and chemical characteristics of the charge were studied to obtain optimum results and to insure free travel of the charge in the furnace and the permeability of the charge to gases. The thermal reactions were investigated and the results graphed. Reduction and slag formation as well as the combustion process proper were the object of intensive studies. The need for the proper control of blast furnace operation is stressed. It is claimed that at present Soviet scientists are attempting to develop a fully automated system for blast furnace operation which will automatically compensate for the variables involved in the process. There are 46 Soviet and 3 English references.

Polyakov, A.Yu., and A.M. Samarin. The Rise of Steel Production in the USSR 187

The article contains a review of the Soviet steel industry. Production figures for the Five Year Plans are given. The use of oxygen blowing in the production of converter steel is regarded as an important develop-

Card 5/21

Metallurgy of the USSR (Cont.)

SOV/1497

ment. A marked increase in the production of alloyed steel is scheduled for 1960. The development of automated processes in foundries is advocated. There are 4 Soviet references.

Khlebnikov, A.Ye. The Development of Open Hearth Technology

195

The paper deals with the development of the steel industry in the USSR. After World War II much work was done to determine the necessary amount of manganese to be used in the open hearth process and its effect on the sulphur content and the operating temperature of the hearth. It is claimed that to date Soviet open hearth production amounts to 2.5 million tons per annum. Some of the large open hearth furnaces have a capacity of 500 tons and are equipped with measuring and control devices to permit full automation of the thermal processes. Oxygen blowing is frequently used and some plants have introduced continuous casting and vacuum treatment of the molten metal in the ladle. The main trends are said to be the reduction of silicon and manganese content, better dephosphorization and the improvement of slag formation. There are 12 Soviet references.

Card 6/21

Metallurgy of the USSR (Cont.)

SOV/1497

Bardin, I.P., and L.M. Efimov. Use of Oxygen for the Intensification of the Open Hearth Process

211

Extensive experiments were carried out using oxygen blowing to speed up and improve the open hearth process. Oxygen was added to the air and forced directly into the bath. The pressure and the amount of oxygen were varied to determine optimum conditions. The results of the experiments are presented by means of tables and graphs. In conclusion it is stated that a number of plants already use oxygen blowing on an industrial scale and that toward the end of the present Five Year Plan about 40 percent of Soviet steel will be produced by this method. There are 10 references, 8 Soviet, 1 German and 1 English.

Veselkov, N.G., and M.A. Chernenko. The Development (Construction) of Open Hearth Furnace and Foundry Shop Design

250

The authors describe Soviet development in this industry since 1913 and mention achievements of the various Five Year Plans. New developments include the design of an open hearth furnace with 100 ton capacity, use of new high-calory fuels consisting of natural or coke gas mixed with fuel oil, and the mechanization of furnace operations. There are 10 Soviet references.

Card 7/21

Metallurgy of the USSR (Cont.)

SOV/1497

Glinkov, M.A. Development of Furnace Theory in the USSR

270

The author traces the development of scientific design of furnaces in the Soviet steel industry. The application of physical and chemical principles is presented in chronological order. The theoretical aspects of furnace operation and combustion processes are still under investigation. There are 52 references, 50 Soviet, 1 French, and 1 English.

Afanas'yev, S.G. Production of Converter Steel in the USSR

283

An outline is given of the development of converter steel production in the USSR. It is stated that present developments in the steel industry favor the converter process, especially the Thomas process, as it is suitable for handling high-phosphorus ores. The ores found in the Kerchensk area and the phosphoritic ores in the Kustanay area in Kazakhstan are treated by the Thomas process. Blowing with oxygen is said to have opened new possibilities for the converter process in the USSR. There are 26 Soviet references.

Edneral, F.P. Production of Electric Steel in the USSR

295

The author traces the development of electric steel production from the early twenties to the Sixth Five Year Plan. Production of steel is

Card 8/21

Metallurgy of the USSR (Cont.)

SOV/1497

to be increased by 79 percent as compared to the 1955 level. The use of oxygen is also to be increased. New electric furnaces of 180 ton capacity and electromagnetic transfer of metal are to be designed. The introduction of mechanization of furnace operations is to be speeded up. At present the largest furnace in the USSR has a capacity of 40 tons as compared to American electric furnaces of 180 ton capacity, and the author stresses the fact that the USSR lags far behind USA in this field. New furnaces of 80 ton capacity are to be introduced shortly. There are 3 Soviet references.

Okorokov, N.V. Relationship Between the Main Parameters and the Coefficient of Production of Electric Furnaces

310

The author investigated the relationship between the capacity or size of the furnace and the fundamental coefficient of production which is defined as the "productivity per time unit and the specific electric power consumption per unit of production." These two factors depend on the relative position of the object to be heated, the source of heat, and the work cycle of the furnace. These relationships were calculated according to the numerous formulas and graphs contained in the text.

Card 9/21

Metallurgy of the USSR (Cont.)

SOV/1497

The results of these theoretical calculations coincide with the actual performance data of some foreign electric furnaces. There are 7 references, 6 Soviet and 1 German.

Gostev, K.I. Continuous Steel Casting

329

The author states that intensive experimental and development work in continuous steel casting techniques has been going on for a number of years and that now continuous steel ingot casting is gaining popularity in Soviet industry. The author describes a number of vertical, inclined and horizontal systems with movable and stationary molds, and each of these systems is illustrated. There are 8 references, 5 English, 1 German, and 2 Soviet.

Polyakov, A.Yu., and A.M. Samarin. Development of the Theoretical Principles of Steel Making

350

Soviet scientists are reported to have done extensive theoretical studies of the physical and chemical processes which take place in the liquid stage of steel making. Reaction between oxygen and carbon in the steel bath has been the subject of numerous studies. The thermodynamic and

Card 10/21

Metallurgy of the USSR (Cont.)

SOV/1497

kinetic behavior of slags and metal has also been studied. The present trend is to apply new scientific achievements in physics and electronics to control and check steel making processes by a fully automatic system on an industrial scale. There are 50 Soviet references.

Filippov, S.I. Development of the Science of the Kinetics of Steel Making Processes in the USSR

361

It is stated that the study of metallurgical processes in the USSR is based on the classic principles of thermodynamics. The author gives numerous equations, formulas and graphs to illustrate his point. Some of these calculations explain certain regularities of oxidizing reactions. For general application of these formulas it is necessary first to obtain empirically the constants for the rate of the chemical reactions. There are 34 references, 24 Soviet, 7 English, and 3 German.

Krasnykh, I.F., and P.A. Sakharuk. The Technology of Producing Ferroalloys

381

A description is given of a number of ferroalloys currently produced in the USSR. The most important is said to be ferrosilicon which requires 52 percent of electric power used in the ferroalloy industry. Other alloys

Card 11/21

Metallurgy of the USSR (Cont.)

SOV/1497

listed include ferrochromium, ferromanganese, ferrotitanium, ferrovanadium and ferromolybdenum with over 90 percent molybdenum. As a source of titanium the Soviets use perovskite^{ore} to obtain concentrates of 48-51 percent titanium oxide. The source of vanadium are various titaniferous magnetites. In conclusion it is stated that more experiments and better methods are needed to improve the production of ferroalloys. There are 40 references, 37 Soviet and 3 English.

Pervushin, S.A. Nonferrous Metallurgy Under the Soviet Regime

399

The author gives a historical review of the development of the non-ferrous industry since the October Revolution. Production figures and targets of the five year plans are quoted. The locations of new nonferrous metal deposits are listed. There are 11 Soviet references.

Glembotskiy, V.A. Concentration of Nonferrous Ores and Ores of Rare Metals 415

Following a brief historical review the author discusses methods of ore concentration such as flotation, gravity separation, magnetic separation, etc. It is claimed that Soviet scientists have done a great deal of work on the theory of flotation based on the latest achievements in physical

Card 12/21

Metallurgy of the USSR (Cont.)

SOV/1497

chemistry, geochemistry, organic chemistry, crystallography and solid state physics. Flow sheets with detailed descriptions are given for the flotation of a number of sulphides. Special methods aimed at the recovery of various accessory minerals of economic importance are presented. It is claimed that the problem of cassiterite flotation has been satisfactorily solved by Soviet metallurgists. There are 8 Soviet references.

Chizhikov, D.M. Nonferrous Metallurgy

448

The article contains a historical review of the nonferrous metallurgy in industry in USSR followed by a list of the more important of research and metallurgical institutes. A description is given of the methods of treating copper, lead, zinc, aluminum, nickel, and tin. Electrochemical methods and the use of oxygen-enriched air are regarded as the important new developments in the metallurgical industry.

Frents, G.S. Roasting Sulphide Concentrates of Heavy Nonferrous Metals

496

This paper deals with the various aspects of roasting sulphide concentrates. The mechanism of the oxidation of sulphides has been the object of intensive studies. Sintering of sulphides is mentioned. A

Card 13/21

Metallurgy of the USSR (Cont.)

SOV/1497

new method is undergoing tests on a semi-industrial scale in which the roasting is done at high temperature and which results in liquid products of the reaction. There are 47 references, 38 Soviet, and 9 German.

Diyev, N.P. (Deceased). Metallurgy of Heavy Nonferrous Metals

508

This article gives an outline of the state of art of metallurgy in the USSR from 1913 to 1957. The development stages are presented in chronological order and the location of deposits, metallurgical plants, research institutes are mentioned. Some production figures are given. Some space is devoted to the production of nickel. It is stated that a new and improved method will have to be developed to improve production. The use of the carbonyl method (presumably a variation of the Mond Process) is to be adopted "within the next few years." There are 74 Soviet references.

Belyayev, A.I. The Metallurgy of Aluminum

529

The author lists bauxite and sillimanite deposits in the USSR and the plants and electric power stations used for processing alumina.

Card 14/21

Metallurgy of the USSR (Cont.)

SOV/1497

Production figures are given. It is planned to use concentrates of sillimanite for the production of aluminum and silumin. Various method of aluminum production are discussed. There are 76 Soviet references.

Gulyanitskiy, B.S. The Metallurgy of Magnesium

552

Russian geological exploration for magnesium minerals is said to have started only under the Soviet regime. The Verkhne-Kamsk deposits of carnallite are reported to amount to billions of tons. A number of saline lakes are listed as another valuable source of raw material. The bays of the Sea of Azov and of the Caspian Sea are reported to contain enough salts for commercial exploitation. Deposits of dolomite are found in most industrial areas of the USSR. Currently three methods of producing magnesium are used in the USSR: 1) electrolysis 2) reduction of magnesium oxide by ferrosilicon, and 3) reduction of magnesium oxide by carbon. Other methods are under development which will take advantage of local conditions and streamline the production of magnesium. There are 89 Soviet references.

Sazhin, N.P. Development of the Metallurgy of Rare and Minor Metals in USSR

570

Rare metals are classified as follows: 1. Light rare metals Li, Rb, Cs, Be, 2. Rare earths - all lanthanides of Sc, Y, 3. Scattered rare metals Ga, In, Tl, Ge, 4. High temperature rare metals Ti, Zr, Hf, V, Nb, Ta, Mo, N, Re, 5. Radioactive metals Ra and all actinoid elements. Mercury, tin,

Card 15/21

Metallurgy of the USSR (Cont.)

SOV/1497

antimony and bismuth are called "minor" or "junior" metals. The various methods developed to produce and refine these metals are described. It appears that production of some of the metals, particularly the semiconductors, is still in the laboratory stage. The need to develop sufficient quantities of high-purity reagents is stressed. There are 69 Soviet references.

Bardin, I.P., and V.A. Reznichenko. Investigations of the Metallurgy of Titanium

583

The article covers experiments carried out in the USSR in the field of titanium metallurgy. Formulas and graphs explain the various reactions in the treatment of titanium ores and compounds. The following methods are currently used to obtain metallic titanium: 1) thermic method of reducing titanium dioxide with calcium and calcium hydride 2) processes based on the decomposition of lower titanium chlorides obtained by the reduction of titanium tetrachloride 3) electrolysis of titanium chlorides, oxides, and fluorides. Some titanium is being recovered from scrap alloys. The need for increased production of metallic titanium and titanium sponge is emphasized. There are 49 references, 37 Soviet, 11 English, and 1 German.

Card 16/21

Metallurgy of the USSR (Cont.)

SOV/1497

Melent'yev, B.N. Investigations of Extraction of Titanium Dioxide From Complex Titaniferous Raw Materials 624

To satisfy the increasing demands for titanium oxides the paint, rubber, paper, and textile industries, new sources and methods had to be found to produce this material. Titaniferous slags are a common source of titanium as extraction is easier than from ilmenite, and there are very large reserves of titaniferous magnetites available in the USSR. The more complex ores of titanium are loparite (complex titanium-niobium rare earths), perovskite, and sphene. Soviet scientists are said to have developed laboratory methods for obtaining titanium oxides. The text contains basic formulas and chemical equations. It is stated in conclusion that more research is needed in this field to satisfy industrial requirements. The author claims that it is imperative to improve methods of extracting from titaniferous slags in order to obtain a concentration of TiO_2 of not less than 75 percent. There are 19 Soviet references.

Kazayn, A.A., and A.D. Khromov. Investigations of the Electrochemistry of Titanium 633

The All-Union Institute for aluminum and magnesium conducted various experiments on electrolytic extraction of titanium from titanium tetrachloride. As a result several methods were developed to produce electro-

Card 17/21

Metallurgy of the USSR (Cont.)

SCV/1497

litically high purity metallic titanium comparable to that produced by the thermic method. There is 1 Soviet reference.

Petrov, D.A. Metallurgy of Semiconductors

638

Germanium and silicon are regarded as the two most important semiconductor materials. As the properties of semiconductors are related to impurities, new methods had to be developed to obtain high-purity crystals of Si and Ge. One method used was to break up by thermal processes the less stable compounds of these elements, in this case SiJ_4 and SiH_4 , the latter being easier to split at lower temperatures. Another method involves the reduction of the compound by an active element such as hydrogen. Other approaches such as crystallization are mentioned. A method of obtaining monocrystals proposed by Chokhral'skiy in Poland is explained as is its application in the construction of a composition diagram. In conclusion it is pointed out that further experiments in this field are necessary to discover the properties of new materials, their compounds and solid solutions. There are 15 references, 13 Soviet, 1 English, and 1 French.

Zvyagintsev, O.Ye. The Metallurgy of Noble Metals

656

The article deals with the extraction and processing of gold, platinum and several other rare metals. Experimental work of this nature is

Card 18/21

Metallurgy of the USSR (Cont.)

SOV/1497

presently centered in Moscow at the Nigrizoloto Institute. Gold extracting is done by amalgamation, cyaniding, and chlorination. Another method involves the smelting of gold-bearing copper, lead, and nickel ores with subsequent extraction of gold by electrolysis. Cyaniding is the chief method of gold extraction at present. Activated charcoal is used to precipitate noble metals from the solution and also to adsorb metals which are later recovered by flotation. To obtain high-purity platinum powder, metallurgical methods are most commonly used. Platinum wire for thermocouples, wires and sheets of iridium, rhodium, and ruthenium are manufactured by this method. One of the future tasks is the discovery of new applications for platinum, ruthenium, and palladium in the field of chemistry as catalysts, in electrical engineering as semiconductors and in other fields. There are 53 Soviet references.

Vol'skiy, A.N. Theoretical Principles of Nonferrous Metallurgy

668

Many theoretical aspects of nonferrous metallurgy have been investigated by Soviet engineers and technicians. Over a hundred personalities are mentioned who have made contributions to this field of metallurgy. Some of the work includes studies of the thermodynamics of reactions of non-ferrous metals, the theory of roasting, smelting, and the reduction of metals. Other investigators explored the chemical and physical properties

Card 19/21

Metallurgy of the USSR (Cont.)

SOV/1497

of slags, thermic processes and pyrometallurgy. The electrolysis of molten salts and aqueous solutions was the object of many studies. The author states that only a part of the work currently done in nonferrous metallurgy has been mentioned in this paper. There are 331 Soviet references.

Yesin, O. A. Development of the Theory of Liquid Slags in the USSR 701
The rapid development of modern metallurgy called for a more thorough knowledge of the composition, behavior, and reaction of molten slags in metallurgical processes. Starting with this premise the author goes on to relate the various theories developed and experiments performed by Soviet metallurgists. The molecular theory is said to have dominated the thinking of many outstanding Soviet scientists such as Baykov, Sokolov, Pavlov, Grym Grzhimaylo, et al. This theory has been complemented by the introduction of the ionic concept, and later, by the ionic theory of liquid slags. Numerous formulas, graphs, and equations explain and confirm the fundamentals of these theories. The ionic theory was successfully applied in the electrolysis of molten metals to extract various elements. The author, in cooperation with Diyev,

Card 20/21

BOLDYREV, G.P.; VOGMAN, D.A.; NOVOKHATSKIY, I.P.; VERK, D.L.; DYUGAYEV, I.V.; KAVUN, V.M.; KURENKO, A.A.; UZBEKOV, M.R.; ARSEN'YEV, S.Ya.; YEGORKIN, A.N.; KORSAKOV, P.P.; KUZ'MIN, V.N.; STRELETS, B.A.; PATKOVSKIY, A.B.; BOLESLAVSKAYA, B.M.; INDENBOM, D.B.; PINKEL'SHTYIN, A.S.; SHAPIRO, I.S.; LAPIN, L.Yu.. Primali uahastiye: NEVSKAYA, G.I.; FEDOSEYEV, V.A.; KASPILOVSKIY, Ya.B., ZERNOVA, K.V.. BARDIN, I.P., akademik, otv.red.; SATPAYEV, K.I., akademik, nauchnyy red.; STRUMILIN, akademik, nauchnyy red.; ANTIPOV, M.I., nauchnyy red.; BELYANCHIKOV, K.P., nauchnyy red.; YEROFEYEV, B.N., nauchnyy red.; KALGANOV, M.I., nauchnyy red.; SAMARIN, A.M., nauchnyy red.; SLEDZYUK, P.Ye., nauchnyy red.; KHLEBNIKOV, V.B., nauchnyy red.; STRETS, N.A., nauchnyy red.; BANKVITSER, A.L., red.izd-vs; POLYAKOVA, T.V., tekhn.red.

[Iron ore deposits in central Kazakhstan and ways for their utilization] Zhelezorudnye mestorozhdeniya Tsentral'nogo Kazakhstana i puti ikh ispol'zovaniia. Otvetstvennyi red. I.P.Bardin. Moskva, 1960. 556 p. (MIRA 13:4)

1. Akademiya nauk SSSR. Mezhduevdomstvennaya postoyannaya komissiya po zhelezu. 2. Gosudarstvennyy institut po proyektirovaniyu gornykh predpriyatiy zhelezorudnoy i margantsevoy promyshlennosti i promyshlennosti nemetallicheskih iskopayemykh (Giproruda) (for Boldyrev, Vogman, Arsen'yev, Yegorkin, Korsakov, Kuz'min, Strelets, (Continued on next card)

BOLDYREV, G.P.--(continued). Card 2.

3. Institut geologicheskikh nauk AN Kazakhskoy SSR (for Novokhetaiky).
 4. Tsentral'no-Kazakhstanskoye geologicheskoye upravleniye Ministerstva geologii i okhrany nedr SSSR (for Verk, Dyugayev, Kavun, Kurenko, Uzbekov).
 5. Nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki poleznykh iskopayemykh (Mikhanobr) (for Fatkovskiy).
 6. Gosudarstvennyy institut proyektirovaniya metallurg.savodov (Gipromet) (for Boleslavskaya, Indenbom, Finkel'shteyn, Nevskaya, Fedoseyev, Karpilovskiy).
 7. Mezhdunarodstvennaya postoyannaya komissiya po zhelezu AN SSSR (for Shapiro, Zernova, Kalganov).
 8. Gosplan SSSR (for Lapin).
- (Kazakhstan--Iron ores)

PATKOVSKIY, A. B.

Metal ✓ **New Directions in the Planning of Sinter Plants.** A. B. Patkovskii. (*Stal*, 1955, (3), 209-215). [In Russian] A three-fold increase in sintering capacity in the U.S.S.R. is anticipated in the next few years, and this article reviews some new developments in sinter-plant design and operation. The characteristics of foreign sinter plants are briefly considered and a typical U.S.S.R. design is illustrated. The need for research on sintering problems is stressed.—S. I.

PATKOVSKIY, A. B.

"New Trends in the Planning of Sintering Plants," Stal', No. 3, 1956.

Comments on Translation B-98318, 26 Jul 56

PATKOWSKA, H.

On the uniqueness of the decomposition of finite dimensional
ANR-s into Cartesian products of at most 1-dimensional space.
Bul Ac Pol math 13 no.1:7-12 '65.

1. Mathematical Institute of Warsaw University. Submitted
October 19, 1964.

PATKOWSKA, H. (Warszawa)

On the decomposition of 2-dimensional ANR-s into a
Cartesian product. Fund math 52 no.1:13-23 '63.

117 AND 120 520131										117 AND 120 520131									
PROCESSING AND PREPARATION NOTES																			
BC 2-1 Variation of continuous absorption of bromine vapour with density and temperature. J. P. KOWSKI (Acta phys. polon., 1935, 3, 385—391; Chem. Zvest., 1936, 1, 2367—2368).—As with Cl_2, the Br absorption bands broaden and increase in intensity as the temp. is raised. J. S. A.																			
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION																			
117 AND 120 520131										117 AND 120 520131									

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001239

Variation of the continuous absorption of bromine vapor with density and temperature. Josef Patkowski. *Acta Phys. Polonica* 3, 385-401 (1934) (in English).—The continuous absorption spectrum of Br vapor enclosed in a fused-silica tube 150 cm. long and 2.5 cm. in diam. is photographed under variations of d. and temp. The spectrograms are made with a Hilger small quartz spectrograph, the Hilger 5, 3 spectrograph and a small Fuess spectrograph. Of the 2 observed maxima in the spectrum the stronger one is visible at $4000 \pm 10 \text{ \AA.}$ the weaker one at $5107 \pm 2 \text{ \AA.}$ With rising temp. ($20-740^\circ$) Br vapor behaves, in general, similarly to Cl (cf. Gibson and Baylis, C. A. 27, 8346), that is, the absorption band becomes broader and the intensity of the max. decreases. Some differences in the structure of the spectra of Br and Cl are discussed. The observed changes of the Br spectrum with temp. cannot be explained even qualitatively on the basis of the Franck-Condon principle. J. Wiertelski

PATKUL', G.M.; KACHTOVA, L.A.

Some milk defects in the manufacture of kefir. Izv.vys.ucheb.
zav.; pishch.tekh. no.2:75-78 '61. (MIRA 14:5)

1. Leningradskiy tekhnologicheskii institut kholodil'noy pro-
myshlennosti. Kafedra tekhnologii moloka i molochnykh produktov.
(Kefir) (Milk)

~~PATAUL', G.M., kandidat tekhnicheskikh nauk.~~

Role of pyruvic acid in the formation of an odor during lactic
fermentation. Trudy LTIKHP 7:25-28 '55. (MIRA 10 7)

1. Kafedra tekhnologii moloka.
(Pyruvic acid) (Milk, Fermented)

Patk 41, 5.17

✓ The role of pyruvic acid in formation of aroma in dairy fermentations. G. M. Patkin. *Trudy Leningrad. Tekhnol. Inst. Khimii. Prikl. 7: 25-28 (1955)*. Various cultures of dairy streptococci were investigated for production of pyruvic acid. These cultures and the production of this acid are significant for the development of aroma in sour cream, butter, sour cream, and fermented milk products. A combination of a culture consisting of *Leuconostoc citrovorum*, *L. desferianum*, and *Streptococcus faecalis*, with a pure culture of *S. cremoris* gave the best results. A culture of *S. faecalis* was less efficient than the above combination or latter alone.
M. M. Piskur